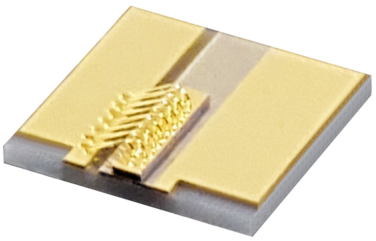
Preliminary Data Sheet



COC 2.5mm PRELIMINARY

High Power SemiNex Lasers
12xx to 19xx nm
Custom Wavelengths Available

Applications
- OEM Medical
- Telecom/OTDR
- DPSS pump source
- LiDAR
- Military / Aerospace

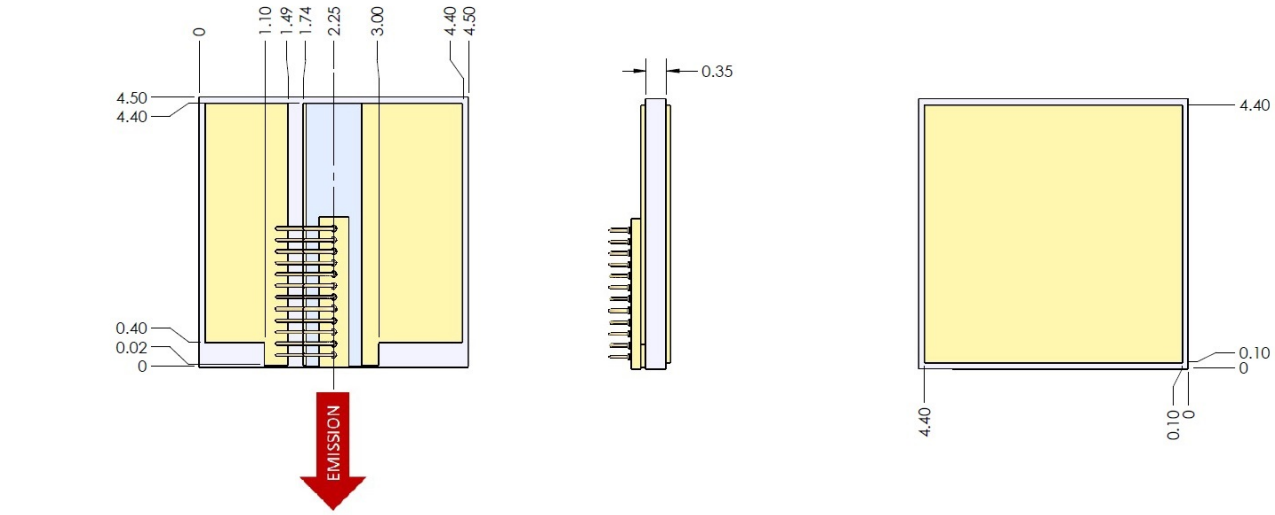
Features
- Cost effective
- High Output Power
- High Efficiency
- Standard Package

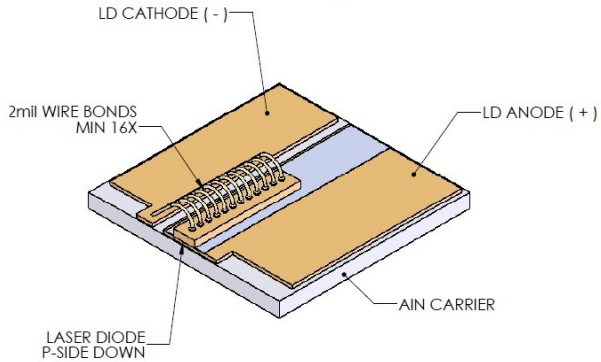
SemiNex delivers the highest available power at infrared wavelengths between 12xx and 19xx nm. When necessary we will further optimize the design of our InP laser chips to meet our customers' specific optical and electrical performance needs. Diodes, bars and packages are tested to meet customer and market performance demands. Typical results and packaging options are shown. Contact SemiNex for additional details or to discuss your specific requirements.

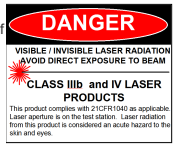
SemiNex LASER DIODES

	Symbol	COC-264	Units
Optical			
Wavelength	λ_c	1550	nm (±20)
Output Power (<10ns)	P_o	35.00	watts (±10%)
Ouput Power (150ns)	P_o	20.00	watts (±10%)
Chip Cavity Length	CL	2500	µm
Emitter Width	W	50	µm
Emitter Height	H	10	µm
Spectral Width	δλ	22	nm 3dB
Slope Efficiency	η_s	0.80	W/A
Fast Axis Div.*	Θ_perp	28	deg FWHM
Slow Axis Div.	Θ_parallel	12	deg FWHM
Electrical			
Power Conversion Eff.	η	9	%
Threshold Current	I_{th}	0.4	A
Operating Current (<10ns)	I_{op}	35	A
Operating Current (150ns)	I_{op}	25	A
Operating Voltage	V_{op}	9	V
Mechanical			
Weight		0.05	g
Operating Temp.**		-40 to 85	°C
Storage Temp.		-40 to 85	°C

Specified values are rated at a constant heat sink temperature of 20°C.
**Specified operating conditions are based on 20C heat sink temperature. High temperature operation will reduce performance and MTTF.
Unless otherwise indicated all values are nominal.







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